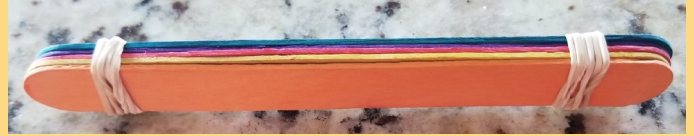


# Craft Stick Catapult

by Ellie Livingstone

Catapults were used in warfare to launch firepower. Catapults are a good way to learn about physics. When you pull back on the craft stick "bucket," potential energy, or "resting" energy gets stored up. And when you release the stick, the potential energy turns into kinetic energy, "moving" energy! Then gravity eventually pulls the launched object back to the ground.

**Step 1:** Stack 5 craft sticks and secure them with a rubber band on each side. Be careful with the rubber bands since they tend to snap. Extras are included.



**Step 2:** Put 3 glue dots on the flat side of the bottle cap and stick it to one end of a craft stick.



**Step 3:** Put together the craft stick with the bottle cap and one other craft stick and secure at the opposite end with one rubber band.



**Step 4:** Slide the stack of 5 craft sticks perpendicularly in between the other two craft sticks. It makes a V.



**Step 5:** Secure the perpendicular stacks, first one side and then the other.



**Step 6:** Now you are ready for catapulting! Use your pompoms and see how they fly! If you have different things, you can launch like mini marshmallows, or jellybeans, predict and test out which will fly the farthest and determine why! You might even want to measure how far you can launch different objects using a ruler or measuring tape.

